WHAT IS CLAIMED IS:

1. A current probe for detecting a value of a current flowing in a signal line under test, comprising:

a first current detecting means in the form of an orthogonal fluxgate element for detecting said current in the signal line under test from DC to a predetermined intermediate frequency band, an induced voltage detecting means for detecting an induced voltage of said orthogonal fluxgate element, and a feedback coil receiving the output voltage of said induced voltage detecting means for generating a magnetic flux for cancelling the magnetic flux generated in said induced voltage detecting means by said current in the signal line under test, and

a second current detecting means having a Rogowski coil and an integration circuit for detecting said current in the signal line under test higher than said predetermined intermediate frequency band.

2. The current probe as recited in claim 1 wherein said first current detecting means further has a shield means for magnetically shielding said orthogonal fluxgate element from external magnetic fields, said feedback coil winding around said shield means which serves as a magnetic core so that said feedback coil effectively generates the magnetic flux.

3. The current probe as recited in claim 2 wherein said shield means is flexible and makes up a magnetic loop with a seam.

4. The current probe as recited in claim 1, 2 or 3 wherein said orthogonal fluxgate element has a magnetic wire to which a driving current is provided, and said magnetic wire is flexible and makes up a magnetic loop with a seam.

5. The current probe as recited in claim 1, 2, 3 or 4 wherein said Rogowski coil is flexible and makes up a magnetic loop with a seam.